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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/971,929 | 10/09/2001 | Naoyuki Takano | 2185-0577P | 2971 |
| 7590 10/30/2006 | | | | |
| BIRCH, STEWART, KOLASCH & BIRCH, LLP | | | | |
| P.O. Box 747 | | | | |
| Falls Church, VA 22040-0747 | | | | |
| EXAMINER | | | | |
| GUDIBANDE, SATYANARAYAN R | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1654 | | | | |

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/971,929

Applicant(s)

TAKANO ET AL.

Examiner

Satyanarayana R. Gudibande

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9-14 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 6, 8 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/21/02, 10/9/01.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of species chitosan trisaccharide and diethylenetriaminepentaacetic acid in the reply filed on 9/26/06 is acknowledged.

Examiner searched the elected species chitosan trisaccharide and diethylenetriaminepentaacetic acid found them free of art. Examiner extended the search and found art on serum albumin and diethylenetriaminepentaacetic acid.

Claims 1-18 are pending.

Claims 3-5 and 7 are withdrawn from further consideration as being drawn to non-elected species.

Allowable Subject Matter

Claims 6, 8 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 2, 9-14 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hnatowich, et al., Int. J. Appl. Radiat. Isot., 1982, 33, 327-327, in light of information available from website <http://www.prospec.co.il/~prospec/cart/catalog/HSA.html#sequence>, on human serum albumin.

In the instant application, applicants claim a process of producing an amide bond that comprises of reacting a compound having an amino group with a polyaminopolycarboxylic acid anhydride in the presence of the polyaminopolycarboxylic acid.

Hnatowich, et al., teaches such a method of amide formation. The reference teaches the preparation of DTPA coupled albumin. In the process, Hnatowich, et al., uses diethylenetriaminepentaacetic acid (DTPA) anhydride to label the human serum albumin (Abstract and page 328, paragraph bridging columns 1 and 2). As required by the claim 1, the human serum albumin is a molecule with amino group and as evident from the information available on the website <http://www.prospec.co.il/~prospec/cart/catalog/HSA.html#sequence>, on human serum albumin, the human serum albumin consists of at least 31 glutamic acids and 22 lysine molecules and hence represents the polyaminopolycarboxylic acid molecule. The reaction of the DTPA anhydride with serum albumin results in the formation of an amide bond meeting the limitations of claims 1, 2, 9-11 and 16-18. The reaction was performed in aqueous buffer meeting the limitations of claims 12-14.

Conclusion

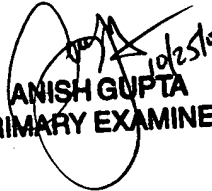
No claim is allowed.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satyanarayana R. Gudibande whose telephone number is 571-272-8146. The examiner can normally be reached on M-F 8-4.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ANISH GUPTA
PRIMARY EXAMINER


Satyanarayana R. Gudibande, Ph.D.
Art Unit 1654